

CLAIMS

Please amend the claims as follows.

1. (Currently Amended) An image compensation method, comprising:
providing a light source to produce light having a first color content;
providing a carrier having a plurality of grooves formed thereon and a plurality of reflecting elements disposed thereon, wherein the grooves are formed on the surface of the carrier and the reflecting elements are disposed on surfaces of the carrier inside the grooves, wherein the light source is disposed in a first one of the grooves, and each reflecting element is arranged ~~to~~, if aligned with the light source, to reflect at least a portion of the produced light from the light source to produce a beam of light biased towards a second color content different from the first color content, wherein reflecting elements are arranged to direct the reflected beam of light to a scanning location;
moving either the carrier or the light source so that the light source is displaced from the groove;
rotating the carrier so that a second different one of the grooves ~~groove~~ aligns with the light source; and
moving either the carrier or the light source so that the light source is disposed in the second groove.
2. (Previously Presented) The method of claim 1, wherein light reflected from at least one of the reflecting elements is biased towards red.
3. (Previously Presented) The method of claim 1, wherein light reflected from at least one of the reflecting elements is biased towards blue.
4. (Previously Presented) The method of claim 1, wherein the carrier is rotated within an imaging device.

5. (Previously Presented) The method of claim 1, wherein the light source comprises a daylight lamp.

6. (Previously Presented) The method of claim 1, wherein at least one of the reflecting elements includes a reflecting region having a width at both ends that is greater than a width in a middle of the reflecting region.

7. (Previously Presented) The method of claim 1, wherein at least one of the reflecting elements includes multiple sections.

8. (Previously Presented) The method of claim 1, wherein at least one of the reflecting elements is partitioned into a plurality of regions and at least one of the regions is configured to reflect light having a different color bias than light reflected from another region.

9. (Previously Presented) The method of claim 1, wherein at least one of the reflecting elements is configured to reflect light having a color content biased toward a single color, or a mix of two or more colors.

10. (Currently Amended) An image compensation method for illuminating a document comprising:

providing a plurality of light sources;

providing a carrier having a plurality of grooves formed thereon and a plurality of reflecting elements disposed thereon, wherein the grooves are formed on the surface of the carrier and the reflecting elements are disposed on the surface of the carrier inside the grooves, wherein the light sources are disposed inside the grooves, wherein each reflecting element is operable to reflect light from a corresponding one of the light sources to produce a reflected light having a different color content than the light from the corresponding light source; and

wherein the reflecting elements are positioned to reflect light to the document.

11. (Currently Amended) The method of claim 10, further comprising rotating the carrier inside a the scanner.

12. (Currently Amended) The method of claim 10, wherein the color content of the light reflected from at least one of the reflecting elements is biased towards blue.

13. (Currently Amended) The method of claim 10, wherein the color content of the light reflected from at least one of the reflecting elements is biased towards green.

14. (Previously Presented) The method of claim 10, wherein the light source comprises a daylight lamp.

15. (Previously Presented) The method of claim 10, wherein at least one of the reflecting elements includes a reflecting region having a width at both ends that is greater than a width in a middle of the reflecting region.

16. (Previously Presented) The method of claim 10, wherein at least one of the reflecting elements includes multiple sections.

17. (Previously Presented) The method of claim 10, wherein at least one of the reflecting elements is partitioned into a plurality of regions and at least one of the regions corresponds to a single color, and the plurality of regions corresponds to a mix of two or more colors.

18. (Previously Presented) The method of claim 10, wherein light reflected from at least one of the reflecting elements comprises a mix of two or more colors.

19. (Currently Amended) An image compensation method, comprising:
disposing a plurality of light sources and corresponding reflecting elements on a carrier such that when one of the light sources is powered to provide light, a

corresponding one of the reflecting elements ~~element~~ reflects a beam of light biased towards a particular color content; and

positioning the plurality of reflecting elements so that one of the reflecting elements is in a position to reflect light provided by the light source and provide the reflected beam of light to a ~~the~~ scanning location.

20. (Cancelled)

21. (Previously Presented) The method of claim 19, wherein the reflected beam of light is biased towards the color red.

22. (Previously Presented) The method of claim 19, wherein the beam of light is reflected within a scanner.

23. (Previously Presented) The method of claim 19, wherein the reflected beam of light is biased towards the color green.

24. (Previously Presented) The method of claim 19, wherein the light source comprises a daylight lamp.

25. (Cancelled)

26. (Currently Amended) An apparatus, comprising:

means for disposing a light source on a carrier;

means for positioning a reflecting element on the carrier, wherein the reflecting element is adapted to reflect at least a portion of ~~the~~ light transmitted by the light source in a beam of light and to bias the beam of light towards a color, the reflected light having a color bias different from the light source, wherein the reflecting element is positioned to direct the beam of light to a scanning location, wherein the light source and the scanning

location form a substantially straight line configuration, and the light source is positioned between the reflecting element and the scanning location; and

wherein the reflecting element includes a reflecting region, the reflecting region having a width at both ends that is greater than a width in a middle of the reflecting region.

27. (Cancelled)

28. (Previously Presented) The apparatus of claim 26, wherein the reflecting element includes multiple sections.

29. (Previously Presented) The apparatus of claim 26, wherein the reflecting element is partitioned into a plurality of regions and at least one of the regions corresponds to a single color, and the plurality of regions corresponds to a mix of two or more colors.

30. (Previously Presented) The apparatus of claim 26, wherein the reflecting element corresponds to a single color.

31. (Currently Amended) A carrier, comprising:

a groove having an interior surface; and

a reflecting element disposed on the carrier and coupled to the interior surface of the groove, the reflecting element having a reflecting region, the reflecting region having a width near ends of the reflecting region that is greater than a width in a middle of the reflecting region, wherein the reflecting element is configured to reflect light having a first color content in a beam of light wherein the beam of light has a second color content different than the first color content, wherein the reflecting element is arranged to direct the reflected beam of light to an image to be scanned.

32-35. (Cancelled)

36. (Currently Amended) An image compensation structure for a scanner, the image compensation structure comprising:

a light source disposed in the scanner and adapted to produce light having a first color content; and

a color compensating reflective element disposed in the scanner and adapted to reflect at least a portion of the light produced by the light source toward a scanning location, wherein the color compensating reflective element includes:

a supporting frame; and

a reflecting element disposed on the supporting frame, the reflecting element having a reflecting region with a width at both ends that is greater than a width in a middle of the reflecting region, wherein the reflecting element is adapted to reflect light from the light source to produce a beam of light having a second color content different than the first color content.

37. (Currently Amended) The structure of claim 36, wherein the beam of light is biased, relative to the light produced by the light source, towards the color red.

38. (Currently Amended) The structure of claim 36, wherein the beam of light is biased, relative to the light produced by the light source, towards the color blue.

39. (Currently Amended) The structure of claim 36, wherein the beam of light is biased, relative to the light produced by the light source, towards the color green.

40. (Previously Presented) The structure of claim 36, wherein the light source comprises a daylight lamp.

41-43. (Cancelled)

44. (Previously Presented) The structure of claim 36, wherein the reflecting element includes multiple sections.

45. (Previously Presented) The structure of claim 36, wherein the reflecting element is partitioned into a plurality of regions and at least one of the regions corresponds to a single color, and the plurality of regions corresponds to a mix of two or more colors.

46. (Previously Presented) The structure of claim 36, wherein the reflecting element corresponds to a single color.

47. (Currently Amended) An image compensation method, comprising:
obtaining a response graph associated with a color content among three primary colors of light provided by a target light source by employing an optical sensor chip;
obtaining voltage values associated with the three primary colors for a given region of the optical sensor chip;
determining color content of a compensating light beam by employing the obtained response graph;
employing the obtained voltage values of the three primary colors to produce a suitable strength for the compensating light beam; and
positioning a reflecting element proximate to a light source having a first color content so that the reflecting element is operable to reflect light from the light source to produce a reflected beam of light having a second color content and a magnitude in accordance with the compensating light beam, the reflecting element including a reflecting region having a width at both ends that is greater than a width in a middle of the reflecting region, wherein the reflecting element is positioned to direct the reflected beam of light to a scanning location.

48. (Previously Presented) The method of claim 47, wherein the second color content is biased towards the color red relative to the first color content.

49. (Previously Presented) The method of claim 47, wherein the second color content is biased towards the color blue relative to the first color content.

50. (Previously Presented) The method of claim 47, wherein the second color content is biased towards the color green relative to the first color content.

51. (Previously Presented) The method of claim 47, wherein the light source comprises a daylight lamp.

52. (Cancelled)

53. (Previously Presented) The method of claim 47, wherein the reflecting element includes multiple sections.

54. (Previously Presented) The method of claim 47, wherein the reflecting element is divided into a plurality of regions and at least one of the regions corresponds to a single color, and at least one of the regions corresponds to a mix of two or more colors.

55. (Previously Presented) The method of claim 47, wherein the reflecting element corresponds to a single color.

56. (Previously Presented) The method of claim 47, wherein the light source and the reflecting element are positioned to direct light from the light source and reflected light from the reflecting element to a scanning location, wherein the light source, the reflecting element and the scanning location are positioned to form a substantially triangular configuration.

57. (Currently Amended) An image compensation method, comprising:
obtaining a response graph of the color content of three primary colors of light provided by a target light source by employing an optical sensor chip;
obtaining voltage values associated with the three primary colors for a given region of the optical sensor chip;

determining color content of a compensating light beam by employing the obtained response graph;

employing the obtained voltage values of the three primary colors to identify a compensating beam having a suitable strength; and

positioning a reflecting element proximate to the light source so that the light reflected from the reflecting element light has a color content and a magnitude in accordance with the compensating beam;

wherein the light source and the reflecting element are arranged to direct light from the light source and reflected light from one of the reflecting elements to a scanning location, wherein the reflecting elements, the light source and the scanning location form a substantially straight line configuration with the light source positioned between the reflecting elements and the scanning location.

58. (Previously Presented) The apparatus of claim 26 wherein the apparatus is a scanner.

59. (Previously Presented) The carrier of claim 31 wherein the carrier is configured to be integrated into an imaging device.

60. (Previously Presented) The carrier of claim 31 further comprising:
another groove having an interior surface; and
another reflecting element disposed on the carrier and coupled to the interior surface of the another groove.

61. (Previously Presented) The carrier of claim 31 wherein the carrier is configured to be movably attached to an interior of an imaging device such that the carrier is rotatable within the imaging device.

62. (Previously Presented) The carrier of claim 31 further comprising protrusions positioned at an upper region of the groove, the protrusions to removably secure a light generating component.

63. (Previously Presented) The carrier of claim 31 wherein the reflective element comprises sputtered material.

64. (Previously Presented) The carrier of claim 31 wherein the reflective element comprises reflective tape.